



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: 09010223 A

(43) Date of publication of application: 14.01.1997

(51) Int. Cl. A61B 17/39

(21) Application number: 08163325

(22) Date of filing: 24.06.1996

(30) Priority: 23.06.1995 GB 95 9512889

23.06.1995 GB 95 9512888

29.12.1995 GB 95 9526627

06.03.1996 GB 96 9604770

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## (54) GENERATOR AND SYSTEM FOR ELECTRIC OPERATION

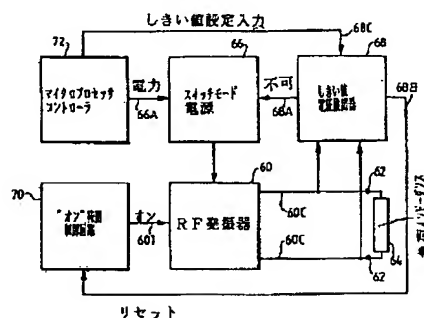
## (57) Abstract:

**PROBLEM TO BE SOLVED:** To prevent the burning of an electrode and/or excessive tissue evaporation by detecting detection signals for indicating a high frequency peak output voltage appearing at both ends of output connection, driving a switching device connected to a resonance output circuit and reducing supplied high frequency power.

**SOLUTION:** At the time of initially driving this generator, a power switching device for forming the oscillation part of an RF (high frequency) oscillator 60 is switched ON so as to maximize electrically conductive time in respective divergence cycles. When the temperature of fluid inside tissues rises to a level where a fluid medium evaporates and load impedance rapidly increases, an output voltage between output terminals 62 is rapidly

increased. Then, when a threshold value is achieved, trigger signals are sent to an ON time control circuit 70 and a switching mode power source 66, the ON time of the switching device is actually instantaneously reduced, a switching mode electrode is simultaneously turned to an impossible state and the voltage supplied to the RF oscillator 60 is lowered.

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